



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

WC

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

QM32/0522

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APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/856,846	05/15/97	006	NGUYEN, T	3738 05/22/00
First Named Applicant	BRYAN,	35 USC 154(b) term ext.	=	0 Days.

TITLE OF INVENTION HUMAN SPINAL DISC PROSTHESIS

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEES DUE	DATE DUE
3 P1147USA	620-017.150	M75	UTILITY	YES	\$605.00	08/22/00

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT.
PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS
APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

HOW TO RESPOND TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give application number and batch number.
Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Notice of AllowabilityApplication No.
08/856,846

Applicant(s)

BRYAN et al.

Examiner

Tram Nguyen

Group Art Unit

3738

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

This communication is responsive to the examiner's amendment of 5 May 2000.

The allowed claim(s) is/are 2-7.

The drawings filed on _____ are acceptable.

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

Applicant MUST submit NEW FORMAL DRAWINGS

because the originally filed drawings were declared by applicant to be informal.

including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. 4.

including changes required by the proposed drawing correction filed on _____, which has been approved by the examiner.

including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

Interview Summary, PTO-413

Examiner's Amendment/Comment

Examiner's Comment Regarding Requirement for Deposit of Biological Material

Examiner's Statement of Reasons for Allowance

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Todd S. Parkhurst on 5 May 2000.

2. The application has been amended as follows:

a. In claim 3, line 1, replaced "Claim 1" with -- claim 6 --.

b. In claim 6, line 7, before "smooth" inserted -- continuous, [-- and after "surface" inserted -- extending substantially across the entire concaval-convex element, and --] In line 8, after "smooth" replaced "convex surface" with -- concave surface --. In line 13, replaced "concaval" with -- concave --.

3. The following is an examiner's statement of reasons for allowance:

The prior art fails to disclose a vertebral disc endoprosthesis comprising relatively rigid superior and inferior concaval-convex elements, each element having an outer surface of predetermined convexity and unreticulated surface roughness for engaging adjacent bone structure which has been milled to mate with the outer convex surface for encouraging bone ingrowth into the mating outer convex surface, *each concaval-convex element also having a continuous, smooth non-porous inner concave surface extending substantially across the entire*

concaval-convex element, and disposed to confront the opposed concaval-convex element smooth concave surface; the endoprosthesis also comprising a solid but relatively resilient convex nuclear body located between the confronting concave surfaces of the adjacent concaval-convex elements, the nuclear body engaging but being separate from the adjacent concave surfaces to permit sliding arcuate movement of the concave surfaces over the resilient nuclear body (emphasis added).

Keller (U.S. Patent No. 4,997,432) fails to disclose concaval-convex elements wherein each element has an outer surface of predetermined convexity. Buettner-Janz et al. (U.S. Patent No. 4,759,766) fails to disclose concaval-convex elements wherein each element has a continuous, smooth non-porous inner concave surface extending substantially across the entire concaval-convex element (see esp. Fig. 9). Therefore, the prior art fails to disclose each and every limitation of the claimed invention.

4. The application having been allowed, formal drawings are required in response to this Office action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

TAN
May 5, 2000


David J. Isabella
Primary Examiner